LPDES PERMIT NO. LA0039390 (Agency Interest No. 2366)

LPDES REVISED FACT SHEET and RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

I. Company/Facility Name: Placid Refining Company, LLC
Placid Refining Company
1940 LA Highway 1 North
Port Allen, Louisiana 70767

II. Issuing Office: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Water Permits Division
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Date Prepared: January 29, 2009

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

IV. Permit Action/Status:

A. Reason For Permit Action:

Proposed revocation and reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46.

In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes

only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX. Chapter 11) will not have dual references.

B. LPDES permit: Permit effective date: July 1, 2006
Minor modification date: May 1, 2007
Permit expiration date: June 30, 2011
Draft permit issued on December 5, 2008*

*A draft permit was issued to Placid Refining on December 5, 2008. Prior to public notice of the draft, the facility contacted this Office and stated that they needed to update their production information to include some processes that they have not previously received credit for, and which were not indicated in the renewal application. The public notice was placed on hold on December 19, 2009.

EPA has not retained enforcement authority.

C. Application submittal date: A permit modification request was received on June 11, 2008. An email was received by this Office on September 30, 2008, requesting that this Office revoke and reissue the LPDES permit in accordance with the information provided in the modification application. Updated production information received on January 29, 2009.

V. Facility Information:

A. Location – 1940 LA Highway 1 North in Port Allen, West Baton Rouge Parish (Latitude: 30° 28' 33", Longitude: 91° 12' 40")

B. Applicant Activity -

The fact sheet and draft permit (issued on December 5, 2008) for Placid Refining Company are being revised to include additional production information and a stormwater outfall (Outfall 008). Changes from the original draft include the following.

1. **Increase in all mass limitations established at Outfall 001;**
2. **Addition of Outfall 008 for non-process area stormwater runoff; and**
3. **An additional phase had been added to Outfall 001. Phase I in the revised draft permit reflects current operations. Phase II represents**

operations taking place after completion of the production expansion to 75,000 BBD.

See the Revised Appendix A.

According to the application, Placid Refining Company refines primarily sweet crude oil to produce gasoline, ultra-low sulfur diesel fuel, jet fuel, petroleum gases, naphtha, and will soon produce low sulfur gasoline. The facility currently operates a nominal 50,000 barrels per day refinery. The facility proposes to expand its operations to refine up to 75,000 barrels per day of crude oil (annual average), with a maximum 82,500 barrels per day.

Below is a summary of the current and proposed production rates. The items in bold indicate the additional processes provided in the facility's application addendum received on January 29, 2009. These items represent processes that are currently operating at the refinery; however, the facility has never received credit for them in their previous permits. In accordance with the effluent guidelines promulgated at 40 CFR 419 Subpart B, additional loading allocations have been included in the permit for these processes.

Process	Current Production (1000 bbl/day)
Feedstock Rate	50
Atmospheric Crude Distillation	50
Crude Desalting	50
Vacuum Crude Distillation	25
Fluid Catalytic Cracking	20
Hydrotreating	**45**
Duo Sol, Solvent Treating, Solvent Extraction, Duotreating, Solvent Dewaxing Solvent Deasphalt	**11**
SO_2 Extraction	**30**
H_2SO_4 Alkylation	**8**
Catalytic Reforming	8.5

Process	Proposed Production (1000 bbl/day)
Feedstock Rate	75
Atmospheric Crude Distillation	75
Crude Desalting	75
Vacuum Crude Distillation	25
Fluid Catalytic Cracking	30
Hydrotreating	**45**

Duo Sol, Solvent Treating, Solvent Extraction, Duotreating, Solvent Dewaxing Solvent Deasphalt	**11**
SO_2 Extraction	**30**
H_2SO_4 Alkylation	**8**
Catalytic Reforming	13

Stormwater to Treatment System = 0.110 MGD

C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guideline	Reference
Refinery Guidelines	40 CFR 419, Subpart B

Other sources of technology based limits:

- LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)
- Best Professional Judgement
- LPDES General Permit for Hydrostatic Test and Vessel Testing Wastewater (LAG670000)

D. Fee Rate -
1. Fee Rating Facility Type: Major
2. Complexity Type: V
3. Wastewater Type: II
4. SIC code: 2911

E. Continuous Facility Effluent Flow - 1.048 MGD

VI. Receiving Waters: Mississippi River (Outfall 001) and Intracoastal Waterway via highway ditch (Outfalls 002, 003, 004, 005, 006, & 007)

Mississippi River:

A. TSS (15%), mg/L: 53.25 mg/l*
B. Average Hardness, mg/L $CaCO_3$: 153.7 mg/l*
C. Critical Flow, cfs: 141,955*
D. Mixing Zone Fraction: 1/3 *
E. Harmonic Mean Flow, cfs: 366,748*
F. River Basin: Mississippi River, Segment No.: 070301
G. Designated Uses: primary contact recreation, secondary contact recreation, fish and wildlife propagation, and drinking water supply

* Information based on the following: Recommendation(s) from the Engineering Section. Determinations of water quality characteristics were taken from ambient monitoring station No. 318 on the Mississippi River at the LA 10 ferry landing in St. Francisville, Louisiana, midstream.

VII. Outfall Information:

Outfall 001

A. Type of wastewater – Continuous discharge of treated process wastewater, process area stormwater, sanitary wastewater, utility wastewaters (including, but not limited to boiler blowdown, cooling tower blowdown, boiler steam, laboratory and terminal wastewaters), tank draw water from a subsidiary terminal and potentially previously monitored stormwater from Outfalls 004, 005 and 006.

B. Location – At the point of discharge from the treatment facility prior to combining with the waters of the Mississippi River
(Latitude 30° 28' 28", Longitude 91° 12'8")

C. Treatment – treatment of wastewater consists of:
- Sedimentation
- Flotation
- Activated sludge
- Rapid sand filter
- Belt Filtration

D. Flow – Continuous: 1.048 MGD

E. Receiving waters – Mississippi River

F. Basin and segment – Mississippi River Basin, Segment 070301

G. Effluent data – See Appendix C

Outfall 002

A. Type of wastewater – Intermittent discharge of low contamination potential stormwater runoff from the northern lay down area and parking lot

B. Location – At the point of discharge from the sump at the northern laydown area of the facility prior to combining with other waters (Latitude 30° 28' 33", Longitude 91° 12' 40")

C. Treatment – None

D. Flow – Intermittent, varies with rainfall

E. Receiving waters – Intracoastal Waterway via highway ditch

F. Basin and segment – Terrebonne Basin, Segment 120109

Outfall 003

A. Type of wastewater – Intermittent discharge of low contamination potential stormwater runoff from the boiler house, maintenance shop area, and administrative parking lot

B. Location – At the point of discharge from the sump at the boiler control house and maintenance shop area of the facility prior to combining with other waters (Latitude 30° 28' 31", Longitude 91° 12' 40")

C. Treatment – None

D. Flow – Intermittent, varies with rainfall

E. Receiving waters – Intracoastal Waterway via highway ditch

F. Basin and segment – Terrebonne Basin, Segment 120109

Outfall 004

A. Type of wastewater – Intermittent discharge of low contamination potential stormwater runoff from the west central plant area and storage lagoon

- The drainage area for Outfall 004 includes process areas for the alkylation unit, F.C.C. unit, hydrotreater/reformer unit, vacuum unit, rose unit, HTU/reformer unit, the cooling tower and the crude process unit. All process units are curbed and the water that falls within the curbed areas is routed to the wastewater treatment plant. Opening of a gate valve is required to allow this outfall to function. This outfall is valved and is only

used when flooding conditions exist. Therefore, discharge from the outfall is rare. Additionally, stormwater from this outfall may be routed to the WWTP and discharged via Outfall 001 if necessary.

B. Location – At the point of discharge from the sump at the storage lagoon prior to combining with other waters (Latitude 30° 28' 28", Longitude 91°12' 39")

C. Treatment – None

D. Flow – Intermittent, varies with rainfall

E. Receiving waters – Intracoastal Waterway via highway ditch

F. Basin and segment – Terrebonne Basin, Segment 120109

Outfall 005

A. Type of wastewater – Intermittent discharge of low contamination potential stormwater runoff from non-process areas surrounding the amine and sulphur units

- The drainage area for Outfall 005 includes process areas for the cyro unit, the amine/sulphur units, and the diesel HTU/sulphur recovery units. All process units are curbed and the water that falls within the curbed areas is routed to the wastewater treatment plant. This outfall is valved and is only used when flooding conditions exist. Therefore, discharge from the outfall is rare. Additionally, stormwater from this outfall may be routed to the WWTP and discharged via Outfall 001 if necessary.

B. Location – At the point of discharge from the sump at the southwest corner of the facility prior to combining with other waters (Latitude 30° 28' 23", Longitude 91° 12' 35")

C. Treatment – None

D. Flow – Intermittent, varies with rainfall

E. Receiving waters – Intracoastal Waterway via highway ditch

F. Basin and segment – Terrebonne Basin, Segment 120109

Outfall 006

A. Type of wastewater – Intermittent discharge of low contamination potential stormwater runoff from the tank farm (south central area of the facility), uncontaminated stormwater runoff from the storage lagoon, and previously monitored hydrostatic test wastewater from Internal Outfall 106

- The area that drains Outfall 006 houses the in-plant tank farm, the wastewater treatment facility, and the fire water pond. The wastewater treatment facility is curbed and contact rainwater from the curbed areas is pumped to the wastewater treatment plant. The tank farm diked areas are valved to keep spills out of the storm water system. Additionally, stormwater from this outfall may be routed to the WWTP and discharged via Outfall 001 if necessary.

B. Location – At the point of discharge from the sump in the south central area of the facility prior to combining with other waters (Latitude 30° 28' 23", Longitude 91° 12' 29")

C. Treatment – None

D. Flow – Intermittent, varies with rainfall

E. Receiving waters – Intracoastal Waterway via highway ditch

F. Basin and segment – Terrebonne Basin, Segment 120109

Internal Outfall 106

A. Type of wastewater – Intermittent discharge of hydrostatic test wastewater

B. Location – At the point of discharge from the piping, vessel, and/or tank being tested prior to mixing with other waters of Final Outfall 006

C. Treatment – None

D. Flow – variable

E. Receiving waters – To Final Outfall 006 thence to the Intracoastal Water via highway ditch

F. Basin and segment – Terrebonne Basin, Segment 120109

Outfall 007

A. Type of wastewater – Intermittent discharge of low contamination potential stormwater runoff from the tank farm area

B. Location – At the point of discharge from the sump at the light ends storage area and adjacent areas of the facility prior to combining with other waters. (Latitude 30° 28' 23", Longitude 91° 12' 22")

C. Treatment – None

D. Flow – Intermittent, varies with rainfall

E. Receiving waters – Intracoastal Waterway via highway ditch

F. Basin and segment – Terrebonne Basin, Segment 120109

Outfall 008 (This outfall is being added to the permit in accordance with the facility's application addendum received January 29, 2009)

A. Type of wastewater – Intermittent discharge of low contamination potential stormwater runoff from the non-process areas surrounding the secondary manufacturing unit

B. Location – At the point of discharge into the roadside ditch along La. 1 prior to combining with other waters. (Latitude 30° 28' 23", Longitude 91° 12' 22")

C. Treatment – None

D. Flow – Intermittent, varies with rainfall

E. Receiving waters – Intracoastal Waterway via highway ditch

F. Basin and segment – Terrebonne Basin, Segment 120109

VIII. Proposed Permit Limits and Rationale:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. PERMIT CHANGES (the items in bold are related to issuance of the revised draft permit)

1. Outfall 001 – Permit limits for BOD, COD, Ammonia, TSS, Oil & Grease, Sulfide, Phenolic Compounds, Chromium VI and Total Chromium have increased as a result of an expansion at the facility which will increase total refinery production to 75,000 barrels per day.

2. Internal Outfall 106 – pH limitations have been added to this internal outfall due to the intermittent nature of the final outfall which receives the wastewater.

3. **Outfall 008 – This outfall has been added to the permit upon request by the permittee in their application addendum received on January 29, 2009.**

4. **Facility production – The following 4 additional processes have been included in the calculation of the facility's mass limitations:**
   a. **Hydrotreating**
   b. **Duo Sol, Solvent Treating, Solvent Extraction, Duotreating, Solvent Dewaxing, Solvent Deasphalt**
   c. **SO_2 Extraction**
   d. **H_2SO_4 Alkylation**

5. **Outfall 001 – Phased limitations have been included in the permit to reflect current and proposed production.**

B. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC

33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for the limitations established in the permit.

Placid Refining Company, LLC is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

Manufacturing Operation	Guideline
Petroleum Refining Point Source Category	40 CFR 419, Subpart B

WATER QUALITY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limitations by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 18, 2008.

In accordance with 40 CFR 122.44(d)(I)/LAC 33:IX.2707.D.1., the existing discharge was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendix B.

As a result of the screen, no pollutants received water quality based effluent limitations.

Minimum quantification levels (MQLs) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. They are also listed in Part II of the permit.

To further ensure compliance with 40 CFR 122.44(d)(I), whole effluent toxicity testing has been established for Outfall 001 (See Section VII.D below).

Below is a summary of the proposed effluent limitations:

Outfall 001 (Phase I) – The continuous discharge of treated process wastewater, process area stormwater, sanitary wastewater, utility wastewaters (including, but not limited to boiler blowdown, cooling tower blowdown, boiler steam, lab and terminal wastewaters), tank draw water from a subsidiary terminal, and potentially previously monitored stormwater from Outfalls 004, 005 and 006

Parameter	Proposed Permit Limits		Monitoring Frequency	Rationale
	Monthly Avg lbs/day	Daily Max lbs/day		
Flow – MGD	Report	Report	Continuous	LAC 33:IX.2707.I.1.b.
pH – s.u.	See (*1) below	See (*1) below	Continuous	Previous permit, LAC 33:IX.1113, 40 CFR 419, Subpart B
BOD	**565**	**1017**	3/week	40 CFR 419, Subpart B
TSS	**452**	**709**	2/week	40 CFR 419, Subpart B
Oil & Grease	**165**	**309**	3/week	40 CFR 419, Subpart B
COD	**3939**	**7603**	3/week	40 CFR 419, Subpart B
Ammonia (as N)	**295**	**649**	1/week	40 CFR 419, Subpart B
Sulfide (as S)	**2.9**	**6.4**	1/week	40 CFR 419, Subpart B
Phenolic Compounds	**3.7**	**7.6**	1/week	40 CFR 419, Subpart B
Total Chromium	**8.2**	**15.3**	1/year	40 CFR 419, Subpart B

Chromium (6+)	**0.6**	**1.2**	1/year	40 CFR 419, Subpart B
Biomonitoring	See Section D below	See Section D below	1/year	See Section D below

Outfall 001 (Phase II) – The continuous discharge of treated process wastewater, process area stormwater, sanitary wastewater, utility wastewaters (including, but not limited to boiler blowdown, cooling tower blowdown, boiler steam, lab and terminal wastewaters), tank draw water from a subsidiary terminal, and potentially previously monitored stormwater from Outfalls 004, 005 and 006

Parameter	**Proposed Permit Limits**		**Monitoring Frequency**	**Rationale**
	Monthly Avg lbs/day	Daily Max lbs/day		
Flow – MGD	Report	Report	Continuous	LAC 33:IX.2707.I.1.b.
pH – s.u.	See (*1) below	See (*1) below	Continuous	Previous permit, LAC 33:IX.1113, 40 CFR 419, Subpart B
BOD	**905**	**1630**	3/week	40 CFR 419, Subpart B
TSS	**725**	**1136**	2/week	40 CFR 419, Subpart B
Oil & Grease	**264**	**495**	3/week	40 CFR 419, Subpart B
COD	**6316**	**12183**	3/week	40 CFR 419, Subpart B
Ammonia (as N)	**481**	**1057**	1/week	40 CFR 419, Subpart B
Sulfide (as S)	**4.6**	**10.4**	1/week	40 CFR 419, Subpart B
Phenolic Compounds	**5.9**	**12.2**	1/week	40 CFR 419, Subpart B

Total Chromium	**9.0**	**24.6**	1/year	40 CFR 419, Subpart B
Chromium (6+)	**0.8**	**1.7**	1/year	40 CFR 419, Subpart B
Biomonitoring	See Section D below	See Section D below	1/year	See Section D below

(*1) The pH shall be within the range of 6.0 – 9.0 standard units at all times subject to continuous monitoring pH range excursion provisions. Where a permittee continuously measures the pH of wastewater as a requirement or option in an LPDES permit, the permittee shall maintain the pH of such wastewater within the range set forth in the permit, except that excursions from the range are permitted, provided:

a. The total time during which the pH values are outside the required range of pH values shall not exceed 446 minutes in any calendar month; and
b. No individual excursion from the range of pH values shall exceed 60 minutes.

EFFLUENT LIMITATIONS BASIS for Outfall 001:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b. and the previous permit.

pH: Requirements are based upon the previous permit and LAC 33:IX.1113.C.1 and 40 CFR 419, Subpart B.

BOD, TSS, COD, Oil & Grease, Ammonia, Sulfide, Phenolic Compounds, Total Chromium, and, Chromium VI: Limitations are based upon 40 CFR 419 Subpart B. See Appendix A for more information on calculation of the limitations.

Whole Effluent Toxicity Testing: See Section D below for justification of requirements.

Outfall 002 – Intermittent discharge of low contamination potential stormwater runoff from the northern lay down area and parking lot

Outfall 003 – Intermittent discharge of low contamination potential stormwater runoff from the boiler house, maintenance shop area, and administrative parking lot

Outfall 004 – Intermittent discharge of low contamination potential stormwater runoff from the west central plant area and storage lagoon

Outfall 005 – Intermittent discharge of low contamination potential stormwater runoff from non-process areas surrounding the amine and sulphur units

Outfall 006 – Intermittent discharge of low contamination potential stormwater runoff from the tank farm (south central area of the facility), uncontaminated stormwater runoff from the storage lagoon, and previously monitored hydrostatic test wastewater from Internal Outfall 106

Outfall 007 – Intermittent discharge of low contamination potential stormwater runoff from the tank farm area

Outfall 008 – Intermittent discharge of low contamination potential stormwater runoff from the non-process areas surrounding the secondary manufacturing unit

Parameter	Proposed Permit Limitations		Monitoring Freq.	Rationale
	Monthly Avg mg/l	Daily Max mg/l		
Flow	Report	Report	1/quarter	LAC 33:IX.2707.I.1.b.
pH	6.0 s.u. (Min)	9.0 s.u. (Max)	1/quarter	Previous permit, LDEQ Stormwater Guidance
TOC	---	50 mg/l	1/quarter	Previous permit, LDEQ Stormwater Guidance
Oil & Grease	---	15 mg/l	1/quarter	Previous permit, LDEQ Stormwater Guidance

EFFLUENT LIMITATIONS BASIS for Outfalls 002, 003, 004, 005, 006, 007 and 008:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

TOC and Oil & Grease: Limitations are based upon BPJ and LDEQ's stormwater guidance [letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)].

pH: Requirements are based upon LAC 33:IX.1113.C.1.

Internal Outfall 106 – Intermittent discharge of hydrostatic test water

Parameter	Proposed Permit Limitations		Monitoring Freq.	Rationale
	Monthly Avg mg/l	Daily Max mg/l		
Flow	Report	Report	1/discharge	LAC 33:IX.2707.I.1.b.
pH	6.0 s.u. (Min)	9.0 s.u. (Max)	1/discharge	LAG670000
TSS (*1 & 2)	---	90 mg/l	1/discharge	LAG670000
Oil & Grease (*2)	---	15 mg/l	1/discharge	LAG670000
TOC (*2)	---	50 mg/l	1/discharge	LAG670000
Benzene (*2)	---	50 µg/l	1/discharge	LAG670000
Total BTEX (*2 & 3)	---	250 µg/l	1/discharge	LAG670000
Total Lead (*2)	---	50 µg/l	1/discharge	LAG670000

(*1) Report the TSS concentration of the intake water on the DMR along with the concentration of TSS in the effluent, if the effluent is being returned to the same water source from which the intake water was obtained. In these cases, concurrent sampling of the influent and the effluent is required, and the net value shall not exceed 90 mg/L.

(*2) For Discharge Monitoring Report calculations and reporting requirements for benzene, analytical test results less than 10 ug/l may be reported as zero. Total Organic Carbon (TOC) shall be measured on discharges from pipelines, flowlines, piping, vessels, or tanks which have previously been in service; i.e., those which are not new. Benzene, Total BTEX, and Total Lead shall be measured on discharges from pipelines, flowlines,

piping, vessels, or tanks which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons. Accordingly, Flow, TSS, Oil and Grease, and pH are the only testing requirements for new pipe or vessels.

(*3) BTEX shall be measured as the sum of benzene, toluene, ethylbenzene, ortho-xylene, and para-xylene as quantified using the methods prescribed by the latest approved 40 CFR 136, Tables, A-G.

EFFLUENT LIMITATIONS BASIS for Internal Outfall 106:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

TSS, TOC, Oil & Grease, Benzene, Total BTEX, and Total Lead: Limitations are based upon the previous permit and the LPDES General Permit for Hydrostatic Test and Vessel Testing Wastewater (LAG670000).

pH: Limitations are based upon the LPDES General Permit for Hydrostatic Test and Vessel Testing Wastewater (LAG670000).

C. MONITORING FREQUENCIES

All monitoring frequencies established in the draft permit are based upon the previous permit. Whole Effluent Toxicity testing frequency is based upon recommendations from the Municipal and General Water Permits Section (see Appendix D).

D. WHOLE EFFLUENT TOXICITY

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall 001 are as follows:

TOXICITY TESTS	FREQUENCY
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, Pimephales promelas	1/year
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, Pimephales promelas	1/year
NOEC, Value [%] Coefficient of Variation, Static Renewal 48-Hour Acute, Pimephales promelas	1/year
NOEC, Pass/Fail [0/1], Lethality, Static Renewal 48-Hour Acute, Daphnia pulex	1/year
NOEC, Value [%], Lethality, Static Renewal 48-Hour Acute Daphnia pulex	1/year
NOEC, Value [%] Coefficient of Variation, Static Renewal 48-Hour Acute, Daphnia pulex	1/year

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to this Office. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. The additional effluent concentrations shall be 0.015%, 0.019%, 0.026%, 0.034%, and 0.046% effluent. The low-flow effluent concentration (critical dilution) is defined as 0.034% effluent.

IX. Compliance History/DMR Review:

Enforcement Review: As of October 13, 2008, the facility has no open enforcement actions.

DMR Review (excursions for the period June 2006 – August 2008):

DMR Date	Parameter	Outfall	Reported (lbs/day)	Permit Limit (lbs/day)
6/30/2006	Ammonia	001	262.8 : 858.3	137 : 302
8/31/2006	Ttl. Phenolics	001	0.1: 6.2	1.5 : 3.7
12/31/2006	pH	001	5.17 s.u.	6 – 9 s.u.
12/31/2006	pH	001	9.49 s.u	6 – 9 s.u.
12/31/2006	TSS	001	354.4 : 924.0	221 : 347
1/31/2007	TSS	001	113.5 : 408.2	221 : 347
7/31/2007	pH	001	9.18 s.u.	6 – 9 s.u.
9/30/07	pH	003	11.2 s.u.	6 – 9 s.u.
11/30/2007	COD	001	1842.3 : 8704.3	1924 : 3719
11/30/2007	TSS	001	247.4 : 873.2	221 : 347
11/30/2007	Oil & Grease	001	52.9 : 170.5	81 : 152
12/31/2007	TSS	001	115.1 : 509.2	221 : 347
4/30/2008	TSS	001	208.1 : 610.4	221 : 347

6/30/2008	BOD	001	>213.9 : >539.0	276 : 497
7/31/2008	BOD	001	161.6 : 1114.2	276 : 497
7/31/2008	Oil & Grease	001	56.7 : 214.0	81 : 152

X. Endangered Species:

The receiving waterbody, Subsegment No. 070301 of the Mississippi River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which is listed as a threatened or endangered species. The draft permit and fact sheet will be submitted to the FWS for review in accordance with a letter dated November 14, 2008 from Rieck (FWS) to Nolan (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, LDEQ has made a preliminary determination that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid Sturgeon. However, after consultation with the FWS, the LDEQ may choose to modify this permit based on information provided by the FWS. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

XI. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XII. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharges described in the application.

XIII. Variances:

No requests for variances have been received by this Office.

XIV. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may

submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

A public notice will be published in a local newspaper of general circulation and in the Office of Environmental Services Public Notice Mailing List.

XV. TMDL Waterbodies:

Placid Refining Company, LLC discharges process wastewaters, utility wastewaters, miscellaneous wastewaters, stormwater and sanitary wastewaters to the Mississippi River (Segment 070301). Segment 070301 is not listed on LDEQ's Final 2006 303(d) List as impaired, and to date no TMDLs have been established.

The discharges from Outfalls 002, 003, 004, 005, 006, 007 and 008 (consisting of low contamination potential stormwater and hydrostatic test water) are to a highway ditch; thence to the Intracoastal Waterway of the Terrebonne Basin; Segment 120109. Louisiana's Final 2006 303(d) List of Impaired Waterbodies Requiring a TMDL revealed that the Terrebonne Basin, Segment 120109 is listed on the 303(d) list as being impaired with sulfates. This impairment was added to the 303(d) list after a TMDL for sulfates was completed on April 19, 2007. Because the discharges from Outfalls 002, 003, 004, 005, 006, and 007 consist of low contamination potential stormwater and hydrostatic test water, it has been determined that the discharges are not expected to cause or contribute to sulfates impairment of the Intracoastal Waterway. No additional limitations have been established in the permit.

The following TMDLs have been completed for Segment 120109:

> TMDLs for Dissolved Oxygen and Nutrients in Selected Subsegments in the Upper Terrebonne Basin, Louisiana (April 2, 2008)
>
> TMDLs for Fecal Coliform Bacteria, Chlorides, Sulfates, Total Dissolved Solids (TDS), Sediment, Total Suspended Solids (TSS), and Turbidity for Selected Subsegments in the Terrebonne Basin, Louisiana (April 19, 2007)

Segment 120109 was included in these TMDLs due to impairments of dissolved oxygen, nutrients and fecal coliform. Placid Refining Company was not considered in the either of the above TMDLs. Furthermore, neither TMDL requires point source dischargers to make further reductions in pollutant loading. This Office has determined that because the discharges from Outfalls 002, 003, 004, 005, 006, and 007 consist solely of low contamination potential stormwater and hydrostatic test water, the discharges are not expected to cause or contribute to

dissolved oxygen, nutrients, or fecal coliform impairments of the Intracoastal Waterway. No additional limitations have been established in the permit.

A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

XVII. Stormwater Pollution Prevention Plan (SWP3) Requirements:

In accordance with LAC 33:IX.2707.I.3 and 4 [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. For first time permit issuance, the Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. For renewal permit issuance, the Part II condition requires that the Storm Water Pollution Prevention Plan (SWP3) be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].